

**PASSAIC RIVER RI/FS
PROGRESS REPORT #33
REPORTING PERIOD: August 13, 2005 through September 16, 2005
DATE: September 30, 2005**

Contract Number: DACW41-02-D-0003
EPA IAG Numbers: DW96941915 and DW96941975
Task Orders: 0008/0011
Malcolm Pirnie Project Numbers: 0285-924/4553-001
USEPA Remedial Project Manager: Alice Yeh 212-637-4427
Malcolm Pirnie Project Manager: Len Warner 914-641-2972
Malcolm Pirnie Deputy Project Manager: Scott Thompson 914-641-2628
USACE Contact: Beth Buckrucker 816-983-3581

Summary of Contract Actions					
Task Order	Contract Action	Date Signed	Cost	Fee	Total Cost
0008	ATP 1	10/15/02	\$791,654	\$60,956	\$852,610
0008	ATP 2/WVN1	2/4/03	\$0	\$0	\$0
0008	ATP 3/WVN2	9/22/03	\$0	\$0	\$0
0008	ATP 4/WVN3	7/28/04	\$9,771	\$526	\$10,297
0008		Subtotal➔	\$801,425	\$61,482	\$862,907
0011	ATP 1	3/11/03	\$306,945	\$18,317	\$325,262
0011	ATP 2/WVN 1	9/10/03	\$306,250	\$19,012	\$325,262
0011	ATP 3/WVN 2	11/6/03	\$0	\$0	\$0
0011	ATP 4/WVN 3	12/1/03	\$475,483	\$27,353	\$502,836
0011	ATP 5/WVN 4	2/4/04	\$88,305	\$5,931	\$94,236
0011	ATP 6/WVN 5	4/29/04	\$146,364	\$8,842	\$155,206
0011	ATP 7/WVN 6	5/17/04	-	-	-
0011	ATP 8/WVN 7	8/27/04 – verbal authorization	\$1,235,822	\$77,345	\$1,313,167
0011	Interim WVN	2/23/05 via e-mail	\$0	\$0	\$0
0011	ATP 9/WVN 8	3/31/05	\$880,962	\$45,319	\$926,281
0011	ATP 10/WVN 9	9/6/05	\$3,605,524	\$194,624	\$3,800,148
0011		Subtotal➔	\$7,045,655	\$396,743	\$7,442,398
			Grand Total Authorized Amount; TO 0008/0011		\$8,305,305

1. Progress Made This Reporting Period.

WAD 01

This WAD has been closed.

WAD 02

This WAD has been closed.

WAD 03

Closure of this WAD is planned in the near future after completing one remaining task (*i.e.*, Battelle to upload the USACE-NY Minish Park sediment chemistry data from 1999 into PREmis under WO 04, WE 4.2d). Battelle staff continued work during this reporting period on manual data entry of the Minish Park sediment chemistry data. The due date for providing the database deliverable is October 20, 2005 (delivery to Pirnie). The deliverable generated by this data analysis will consist of an MS Access database designed to agree with the PREmis structure, containing the final quality controlled data. The authorization of WVN 9 finalized a number of other tasks under WAD 03.

WAD 04

Malcolm Pirnie, Battelle, and HydroQual participated bi-weekly conference calls on August 16 and 30, 2005 with project team members from USEPA Region 2 and USACE – KC District. The bi-weekly conference calls are generally scheduled for every other Tuesday at 9:30 AM ET. During this reporting period, a template agenda was developed for the bi-weekly calls and will be attached to PREmis calendar notifications in the future for use by the participants.

Malcolm Pirnie, Battelle, and HydroQual participated in weekly internal briefing calls with Malcolm Pirnie task leaders and Battelle and HydroQual project managers. These calls are scheduled on Monday mornings from 9:30-10:30 AM ET.

On August 23, 2005, a field activity update call was held to summarize the mobilization for the Be-7 surface sediment sampling. Participants were Alice Yeh (USEPA), Beth Buckrucker (USACE), Ed Garvey (Malcolm Pirnie), Bruce Fidler (Malcolm Pirnie), and Len Warner (Malcolm Pirnie).

On July 29, 2005 Malcolm Pirnie submitted a Progress Report and preliminary Budget Status and Forecast (BSF) covering the period from June 18, 2005 through July 15, 2005 to the USACE and USEPA. HydroQual and Battelle submitted progress reports and reports of expenditures to Malcolm Pirnie in support of this effort.

On September 7, 2005, a Project Delivery Team (PDT) Meeting was held. Participants included USEPA (Elizabeth Butler, Patricia Hick, David Kluesner, Chuck Nace, Bill Sy, and Alice Yeh), USACE (Scott Nicholson, Susan Schneider, and Peter Weppler), NJDEP (Michele Bakacs and Janine MacGregor), NJDOT-OMR (Lisa Baron), Port Authority (Rosalie Siegel), USFWS (Tim Kubiak), TSI (Rick McNutt), demaximis, inc. (Rob Law and Bill Potter), Dawson and Associates (John Burns), Woodward Environmental (Mike Johns), NY Academy of Sciences (Marta Panero), NRDC (Larry Levine), PVSC (Ashley Pengitore), Passaic River Institute of Montclair State University (Kirk Barrett), Passaic River Coalition (Anne Kruger), and Malcolm Pirnie (Bruce Fidler and Scott Thompson). Topics discussed included the goals, execution and schedule for the High Resolution Coring and Water Column Sampling programs; an update on the bidding process, implementation schedule, monitoring program, and decon contractors for the Dredging and Decontamination Pilot Study; the September 14-15 public forums; the Planning Workgroup meeting scheduled for September 21st; deadline for comments on the Restoration Opportunities Report (October 15th); plans for a Restoration Workgroup Meeting the week of November 28th; and an open forum that included comments on construction at the Dundee Dam, NBSA sampling, and a suggestion to expand the PDT to the NBSA study.

The Draft Community Involvement Plan (CIP) was released by USEPA on August 18, 2005. Malcolm Pirnie posted the document (along with associated press releases and website text) to ourPassaic.org and ourNewarkBay.org on August 18, 2005, as requested by USEPA. Nine hardcopies of the Draft CIP were submitted to USEPA by Malcolm Pirnie for delivery on August 17th. Malcolm Pirnie also delivered 2 copies each to the information repositories in NJ, and 25 more copies and 100 CDs were subsequently provided to USEPA.

During the reporting period, Malcolm Pirnie prepared presentation materials at the direction of David Kluesner (USEPA) for the Community Involvement Meetings in Rutherford, NJ and in the Ironbound section of Newark, NJ. Elke Muskar, Anne Ryshlenski, Bruce Fidler, and Len Warner subsequently attended the public forums at the Rutherford Public Library (September 14, 2005) and Newark's East Side High School (September 15, 2005) and assisted with responses to questions from the public.

WAD 05

Work efforts in this WAD were focused on the following project elements: Field Facility; Field Activities; Laboratory Issues/Subcontracts; Planning Documents; Risk Assessment; Miscellaneous. These topics are discussed below.

FIELD FACILITY

The following work was performed at the field staging area (1 Madison Street, East Rutherford, NJ) in preparation of upcoming field activities:

Floating Dock Permit Application

On August 31, 2005, Malcolm Pirnie mailed the Affidavit for Title form to Kelways Associates to obtain all five signatures of the members of the Keller family (a.k.a. Kelways Associates), in response to a request from Susanne Ripp of NJDEP's Bureau of Tidelands Management, completing the paperwork for the Tidelands application.

On September 7, 2005, the Tidelands Resource Council approved a 7-year lease for the floating dock facility, effective upon receipt of the first year's lease fees and processing fees from Malcolm Pirnie, and the approval of the minutes from the September 7th meeting. Notification of NJDEP approval for the floating dock facility was sent via e-mail to James H. Cannon of USACE-NY to reiterate Malcolm Pirnie's understanding that no federal permits are required for the dock facility installation. On September 19, 2005, Malcolm Pirnie received confirmation from USACE that no further permits were required based on the CERCLA project area designation and Regulatory Guidance Letter 94-2.

Floating Dock Construction

During the reporting period, sections of the floating dock were purchased and assembled off-site. Based on the approval of the application at the Tidelands Resource Council meeting on September 7, 2005, and the receipt of additional permit paperwork from NJDEP (expected to follow processing of Malcolm Pirnie's lease fee checks by NJDEP), installation of the floating dock facility can proceed. Considering, however, that the dock would most likely need to be removed by the end of October due to weather concerns, it is proposed that the dock be placed directly into storage and delivered and installed in Spring 2006.

Core Processing/Office Facility

During the reporting period, placement of floor marking tape to demarcate work areas (e.g., contaminant reduction zone, support zone, and exclusion zone) was completed. Field sampling equipment (including expendables such as sample jars and tyvek coveralls) continued to be purchased and stored at the field facility.

The icemaker, a walk-in, -20°F freezer that can accommodate both archived "short" cores and archived sample jars, and a walk-in refrigerator was delivered to the site. Plumbing and electrical service was being provided to these appliances (along with a refrigerant charge) during the reporting period and is to be completed during the week of September 12, 2005.

FIELD ACTIVITIES

Field Meeting

On September 6, 2005 a kick-off meeting was held at the field facility in East Rutherford, NJ. The kick-off meeting included a discussion of project overview and investigation approach, health and safety briefing, technical description of the high resolution coring program and a walk through of the core processing procedure using sand filled lexan tubes. Training on the use of the field application was also included.

Geophysical

Malcolm Pirnie initiated review of the geophysical survey report deliverable submitted by ASI on August 26, 2005. Dr. Roger Flood of Stonybrook University participated in the review of the side scan sonar and sub-bottom profiling data and interpretation.

Sedflume/Gust Mesocosm Experiments

Raw Sedflume data was retrieved from the USACE ERDC FTP site and posted to PREmis on August 18, 2005. HydroQual and Malcolm Pirnie cooperatively reviewed the Sedflume and Gust data during the reporting period to generate comments for ERDC's preparation of a final Sedflume report.

Hydrodynamic Data/Moored Instrumentation

Solomon Gbondo-Tugbawa and Doug Auld of Malcolm Pirnie observed a hydrodynamic/ship track survey conducted by Dr. Bob Chant of Rutgers University during the week of September 5th to coordinate information transfer for sampling consistency. A subcontract agreement had been investigated with Dr. Chant to conduct the work; however, an international project obligation has prevented Dr. Chant's team from being available to conduct further work on the Passaic during the Fall of 2005. Based on their observations, Malcolm Pirnie will be able to complete the planned hydrodynamic/ship track surveys without further assistance from Rutgers University. Initial events are to be conducted simultaneously with the initial water column sampling efforts.

Water Column Sampling Program

Throughout the reporting period, Malcolm Pirnie project team members (Solomon Gbondo-Tugbawa, Jim McCann, Dennis McGrath, and Chris Purkiss) coordinated the preparation of semipermeable membrane devices (SPMDs) for deployment in the Passaic River and negotiated the lease agreement for the Infiltrex device with Axys Analytical Services.

Density Profiler

USACE-KC coordinated with Malcolm Pirnie and Willy Lick to investigate the feasibility and utility of mobilizing the density profiler for testing of sediment cores collected either during the high resolution or low resolution coring programs in 2005. It was decided not to mobilize the density profile due to the very limited scope of low resolution coring in 2005 and the lack of a spatially variable (all similarly depositional

locations) dataset in the high resolution coring program. It was determined that the best use of the density profiler would be for an expanded low resolution coring program (anticipated in 2006) with high spatial variability in the collected cores.

High Resolution Coring

In late August 2005, Malcolm Pirnie commenced the collection of surface sediment samples for Be-7 analysis to provide another line of evidence in the selection of high resolution coring locations. The Be-7 sampling's intent is to confirm that the selected coring sites are currently receiving deposition to compliment the analyses that suggest that they are historic depositional sites. In addition to collecting the surface sediment samples, piston core samples were advanced by hand to examine stratigraphy at the proposed sites and probing was also conducted. Approximately 35 surface sediment samples were collected and submitted for analysis. Outreach Laboratories provided Be-7 data for the initial sample delivery groups during the reporting period and review of the preliminary data indicated that significant Be-7 detections were associated with a subset of the locations explored. This data was factored into selection of the high resolution coring target areas.

On September 12, 2005, the High Resolution Coring Program was initiated, including both vibracore collection and core sample processing at the field facility. During the period September 12 through 30, 2005, 6 high resolution coring sites were occupied, groups of cores were collected from each site (classification core, core for processing and chemical sampling, archive, x-radiograph core) and samples were submitted from the cores for radiochemistry and TOC analysis. The following high resolution cores have been collected to date (through September 30, 2005):

005 (RM 1.05)
007 (RM 1.4)
009 (RM 2.2)
010 (RM 2.6) – two cores collected and processed due to short length
017 (RM 3.5)
018 (RM 4.1) – two cores collected and processed due to short length

For cores less than 10 feet in length, a second core was collected, processed and sampled to address minimum sample volume requirements. Additional sample volume from the cores intended for future chemical parameter analysis was archived in the on-site freezer. Archive cores, cores slated for x-radiograph analysis, and core segments for physical properties analyses (grain size) were stored in the on-site freezer and refrigerator as appropriate.

SUBCONTRACTS

Laboratories

During the reporting period, Malcolm Pirnie continued to work with each selected subcontract laboratory to finalize method selection, RL requirements, sample

preservation and holding times, etc. These issues have a direct bearing on and must be entirely resolved prior to completion and submittal of the Pre-Final QAPP.

A Consent Package for Outreach Laboratory, Inc. (sediment sample radiochemical analyses) was forwarded to USACE-KC Contracting for review and approval on August 17, 2005. USACE Consent for the Outreach subcontract was received on August 23rd.

A conference call was held with Jennifer Feranda on August 19, 2005 to discuss additional CLP coordination issues.

On August 18, 2005, USACE consent was obtained for the Severn Trent laboratory subcontract agreement.

Malcolm Pirnie coordinated with Colin Davies of Brooks Rand (the lab who will be doing metals speciation of Passaic) on sampling techniques for trace metals pertinent to the water column sampling program.

On-Water Sediment Coring Subcontract

A Consent Package for the sediment coring subcontract with AquaSurvey, Inc. was forwarded to USACE-KC Contracting and received on August 17, 2005. The subcontract agreement was executed with Aqua Surveys on August 30, 2005.

PLANNING DOCUMENTS

QAPP

Initial comments on the Pre-Final QAPP were received from USEPA on August 18, 2005. The remainder of USEPA's comments were received on August 23, 2005. The Final QAPP was posted to Premis on August 30, 2005. USEPA requested that the QAPP be posted to www.ourPassaic.org on August 30, 2005.

FSP Volume 1

The revised FSP Volume 1 text was posted to PREmis on August 26, 2005. Document development effort relative to specific sampling programs is provided below:

Water Column Sampling Program

Comments on the Water Column Sampling program were received from Earl Hayter and Reyhan Mehran on August 18, 2005. Figure 6-1, showing proposed water column sampling locations in the LPR, was posted to PREmis on August 23, 2005.

High Resolution Coring Program

USEPA requested that Malcolm Pirnie provide the shape files for the high resolution coring target areas to demaximus, inc. A deferment was requested until the geophysical data (side scan sonar data) included in the evaluation and figures is reviewed/QA'ed via the preparation of the geophysical survey report.

On August 16, 2005, Malcolm Pirnie and HydroQual participated in a conference call on to discuss objectives/plans/target areas/merit of plan/usability for high resolution coring. A brief follow-up discussion on Sedflume/Gust data; raw data and sampling logs was also conducted.

A teleconference with the TAC was held on August 26, 2005 to prepare for the Sampling Workgroup Meeting on August 31, 2005.

A Sampling Workgroup Meeting was held on August 31, 2005 at USEPA Region 2 to discuss the selection of high resolution core sampling locations and finalization of the WP, FSP, Volume 1, and QAPP.

FSP Volume 2

Battelle contributed to additional comments and rewrites of sections of the FSP2 Pre-Draft dated August 26, 2005, which was completed on August 31, 2005.

FSP Volume 3

The revised Pre-Draft FSP Volume 3, along with the Restoration Opportunities Report, were posted to ourPassaic.org on September 6, 2005.

RISK ASSESSMENT

Battelle began developing rationale to reduce the list of COPEC evaluated in the BERA and identifying likely ecological risk drivers for detailed toxicity reference development. Human health risk activities conducted by Battelle included literature searches associated with fish species identification, cooking loss, and fish & crab consumption study.

DUNDEE DAM MONITORING

On August 16, 2005 Malcolm Pirnie provided a summary of proposed costs for monitoring at Dundee Dam (as an alternate consideration to the proposal submitted by the USGS) for USEPA's transmittal to USACE-NY as a candidate project for end-of-year funding. This effort was necessitated because the ATP 10/WVN 9 negotiated budget could not accommodate the cost of the Dundee Dam Monitoring Program.

MODELING

HydroQual initiated discussions with Earl Hayter of USEPA on August 16, 2005 to transfer the ECOMSED hydrodynamic model code for Mr. Hayter's peer review. The model code, as well as a user's manual and HydroQual's "long straight channel estuary" testing platform was provided. On September 13, 2005, Mr. Hayter was provided with a revised version of the test bed code while visiting HydroQual's office.

For the Hydrodynamic Modeling effort, HydroQual made the following progress:

- Ran the spin-up year of the model for 1994-95 with the new Passaic River/Hackensack bathymetry grid:
 - a. plotted the elevation, fluxes, temperature and salinity.
 - b. ran the entire year using BAROTROPIC(2D) option.
 - c. currently working on the 3D modes.
- Worked on preparation of the hydrodynamic inputs for the years: 1995-96, 1996-97, 1997-98, and 2002-03.
- Created inputs for river flows; downloaded USGS gage river flow data for 1990-2003. Still waiting for official 2004 data from NY. Calculated river flows for rivers that do not have gages.
- Created inputs for elevations. Downloaded Sandyhook and Nantucket NOAA data and calculated the 34hlp and ran an OSU program to calculate tides.
- Created meteorological inputs. Ran program to extract the met data from JFK airport and wrote to model input files.
- Conducted a test run of ECOM hydrodynamics for Water Years 1995 and 2004.
 - a. Compared the Water Year 1995 model results with field data (elevations, temperature, and salinity). The results are comparable with the results of previous CARP study. Temperature and salinity computations in the Passaic and Hackensack Rivers were in very good agreement with data.
 - b. Identified areas where the model needs improvements. Dr. Chant of Rutgers University collected extensive ADCP current meter data as well as continuous observations of temperature and salinity in the Passaic River during Summer and Fall of 2004. These data sets will also be used for the calibration of the hydrodynamics model of Passaic River.
 - c. Generated model inputs for 1995-2004 period including open boundary forcings, freshwater inflows, meteorological data for multiple years.
 - d. Currently developing freshwater input for the Passaic and Hackensack river drainage areas from improved landside modeling results (RAINMAN). The new landside model accounts for better estimation of surface runoff in the study area.
 - e. Generated landside inflows (CSO/SW) for the Passaic and Hackensack River drainage areas downstream of USGS flow gauges (*i.e.*, Passaic River at Little Falls, Hackensack River at Oradell Dam) for 10 years (water year 1995 – 2004) utilizing most updated RAINMAN program inputs.
- For the Wetting and Drying model:
 - a. Completed one-year simulation of the model using the wetting and drying scheme on the Lower Passaic River model domain. Currently analyzing the model results comparing with observed data as well as the model results without the wetting/drying scheme.
 - b. Continued testing wetting and drying scheme in an idealized channel test domain.
- Model Runs: the Lower Passaic model was calibrated with Water Year 2004 data:
 - a. Completed one year simulation and the model results were compared with field data (T/S data from NYC DEP and CT DEP water quality collection

- programs, NOAA tide gauges, Rutgers' 2004 mooring data in the lower Passaic River: ADCP, ADP, and continuous moorings of T/S sensors)
- b. Reconfigured the model depth with COE survey data: for Water Year 2004 setup only; configuration for other years require consultation with COE Survey Report.
 - c. Preparing to start new simulations with refined inputs: model depths, CSO/SW flows, and meteorological data.

For the Sediment Transport Modeling effort, HydroQual made the following progress:

- Mass balance assessment of solids entering the Passaic River in progress. Initial Mass Balance computed at a large scale.
- First version of the 1-D bed erosion protocol in process of incorporation.
- Analysis of Sedflume experiments data in progress. Plots generated.
- Flocculation protocol: work in progress; awaiting clarifications from Dr. Lick. At present using relying on Farley's flocculation protocol as review of alternative formulations continue. HydroQual is proceeding into hiring Professor McAnally from Mississippi State University, a leading expert in flocculation theory and application, to support HydroQual's effort in evaluating alternative formulations.

HydroQual continued review of the USACE bathymetric data and historical hydrographic (hydrodynamic) data in the study area to design and configure the computational grid of the Passaic River study. Tasks conducted to review this data included:

- Newark Bay, Arthur Kill, Kill van Kull, and Ambrose Channel bathymetry reviewed.
- Creating data inventory: generated maps of extent of surveys by region and by year of survey
- Interpolating survey data into model grids by years: currently working on the Newark Bay region; attached are the plots of COE bathymetry data we received and processed so far. We are making table of dredging activity in the study area to incorporate into model depth configuration. Ambrose Channel at the NY Harbor entrance is still coming.
- Processed data received from COE and identifying the areas and timeline of dredging activities between 1998 and 2005.

WAD 06

Work efforts in this WAD were focused on preparation of the following topics: Website/Database and Historical Geochemical Data Evaluation. These topics are discussed below.

WEBSITE/DATABASE

Malcolm Pirnie performed the following work with respect to the following modules/aspects of the field application:

- The notification engine for the PREmis calendar event e-mails was debugged and upgraded.
- Completed work on the High Resolution Sediment Coring module of the field application, the Trip Report Module, and the Outstanding Laboratory Samples Report module.
- Continued work on Forms II Lite data export.
- Continued work on the Water Column Sampling module of the field application.
- Continued work on the Low Resolution Coring module of the field application (an extension of the High Resolution Coring module, including an investigation of potential unique aspects between the two programs and QA/QC).

Ongoing routine maintenance (*e.g.*, updating news items and meeting announcements) occurred on *ourPassaic.org*. The content of the front page on *ourPassaic.org* was reorganized slightly to avoid the need for users to scroll unnecessarily.

HISTORICAL/GEOCHEMICAL DATA EVALUATION

On August 2, 2005, the Final Geochemical Memo was uploaded to PREmis.

Battelle completed their task plan for Preliminary Geochemical and Statistical Analyses and began work on selecting and compiling data for biota plots. Battelle corresponded with AmyMarie Accardi-Dey (Malcolm Pirnie) regarding conventions for summation of analyte groups, use of total Aroclors and summed PCB congeners, etc.

WAD 07

Based on direction following August 8, 2005 meeting with USEPA (George Pavlou), Malcolm Pirnie has initiated work on interim remedial measure evaluation. A draft memo with options for refocusing the scope of the Preliminary Feasibility Evaluation on the IRM was submitted to USACE and USEPA on September 19, 2005.

2. Issues and Recommended Solutions (or Outstanding Issues).

- Technical

HydroQual is awaiting receipt of ADCP and other hydrographic data from the USACE Flood Control Study. Technical issues regarding the use of the USACE bathymetric data for Newark Bay are primarily resolved, and HydroQual is proceeding to incorporate this data.

Battelle's work on the Geochemical Evaluation experienced delays due to a problem with the accuracy of some of the CARP tissue station locations. Some stations are

“plotting” on land, some more than one mile away, apparently the result of insufficient significant figures in the latitude and longitude coordinates. Battelle staff (Gulbransen) contacted the CARP PI, who explained that NOAA had a hardcopy map pinpointing accurate station locations. Additional station location discrepancies were revealed when information was received from Alice Yeh, explaining that TSI had identified corrections to several other biota sample locations. Pirnie staff (Shane McDonald) are working on correcting these sample coordinates in PREmis before we proceed with using the data to create plots. A revised deliverable due date of October 5 was requested; Battelle will inform Pirnie if an additional extension is needed to prepare biota plots once all discrepancies are resolved.

- **Schedule**

The project schedule is currently being updated. A draft of the revised schedule will be reviewed with USACE on October 3, 2005 and subsequently finalized and posted to PREmis.

- **Funding**

Due to project funding issues, the costs of the high resolution coring program are being closely monitored to constrain expenditures as closely as possible to authorized totals. Billable labor expended during the Be-7 surface sediment sampling in late August and early September and pre-coring training efforts totaled approximately \$25,000. In addition, the burn rate during the first two weeks of the high resolution coring program exceeded the projected rate; therefore, USACE and USEPA were alerted during September 28-30th of the potential need to reduce the number of high resolution cores processed and sampled to constrain costs. As discussed with USEPA and USACE, ASI will be directed to collect the planned cores from 15 target locations, and the labor expended during processing will be tracked closely. Further communication/coordination will be held with USACE and USEPA to determine whether each of the collected cores should be processed.

Malcolm Pirnie is currently working to coordinate potential end-of-year funding available from USACE-NY to begin a solids monitoring program at Dundee Dam. Solids data at the Dundee Dam is critical to the completion of the Sediment Transport Model by HydroQual. Delays in beginning a Dundee Dam study, due to coordination with USGS and funding issues, are beginning to suggest potential impacts in the project schedule for the completion of the Sediment Transport model.

To address the above described issues and other concerns regarding task prioritization over the next several months, Funding Prioritization discussions will be initiated with USACE and USEPA on October 3, 2005.

3. Anticipated/Planned Activities in Next 30 Days

Anticipated meetings, conference calls, and activities are organized by topic and presented below.

General/Project Management

Community Involvement

- Malcolm Pirnie has been requested to prepare informational materials on the high resolution coring field work, including photographs of the core collection and processing and a write-up summarizing the field program objectives and activities.
- As directed, Malcolm Pirnie will continue work on the Project Roadmap and other CIP support activities. Work may commence during the upcoming reporting period on the review of public comments pertaining to the Draft CIP.

Laboratory Issues

- Malcolm Pirnie will coordinate with CLP RSCC to accommodate receipt of the rinsate blank samples from the high resolution coring effort. Sediment samples are not expected to be submitted to CLP until around early December or later, pending review and evaluation of the radiochemistry data from the high resolution cores.
- Malcolm Pirnie will track laboratory receipt and analysis of sediment radiochemistry and total organic carbon (TOC) samples from the high resolution coring effort.

Laboratory Subcontracts

- Malcolm Pirnie will review the responses to the Data Validation Invitation for Bid (IFB). It is possible that more than one respondent will be selected for the data validation effort based on the stated experience of the respondents.

Field Activities

- Malcolm Pirnie and NJDOT-OMR will discuss the possibility of Malcolm Pirnie providing a shuttle boat, 2-3 ADCPs, and a mooring structure for the October 2005 Dredging and Decontamination Pilot Study.
- Alice Yeh (USEPA) will discuss Malcolm Pirnie's comments on USGS's proposed monitoring plan for the Dundee Dam with Tim Wilson.

Field Facility

- Malcolm Pirnie will arrange for delivery of the project boat (expected in late September 2005).
- Although NJDEP approval for the floating dock facility was obtained, it was decided that the docks should be put into storage over the winter until the launch of the 2006 field programs.

- Malcolm Pirnie will prepare and submit an investigation-derived waste disposal subcontract.

High Resolution Coring and Water Column Sampling

- High resolution core collection will recommence in Dundee Lake on October 4, 2005. Core processing will recommence on October 5, 2005.
- The collection of water column samples using the Infiltrex equipment will begin on October 5, 2005.

Risk Assessment

- Preparation for and attendance at the BERA workshop will occur during the next reporting period, as directed by USEPA. USEPA has indicated that the BERA workshop will be scheduled during the week of October 17, 2005.
- For WAD 5, WO 2.2 – CSM/Problem Formulation Task Plan, the following tasks will be conducted:
 - Eco risk activities to include TRV and BSAF portions of the CSM task.
 - Pam Rodgers to contact Marion Olsen to discuss fish & crab consumption. A technical memo describing fish species identification will be prepared later in September.

Planning Documents

- In October 2005, a Low Resolution Sediment Coring Work Group Teleconference will be held between project team members, agencies, and stakeholders to discuss the proposed coring locations.
- Revised QAPP amendments will be submitted, including revised procedures for archived sample freezing and subsequent thawing for analysis.

Modeling Work Plan/Modeling Efforts

- A Modeling Workgroup Meeting is scheduled for October 5, 2005, following a TAC conference at EPA Region 2 HQ on October 4, 2005.
- HydroQual and Malcolm Pirnie will provide responses to TAC and stakeholder comments on the Draft Modeling Work Plan. USEPA has indicated that they will provide agency and stakeholder comments on the Draft Modeling Work Plan following the Modeling Workgroup meeting on October 5, 2005.
- For the Hydrodynamic model, Hydroqual will:
 - continue incorporating bathymetric data, bed consolidation, and wetting and drying to the Hydrodynamic Model development.
 - Further runs will be conducted and analyzed
- For the Sediment Transport model, HydroQual will:
 - Incorporate 1-D bed erosion modeling protocol into code.
 - Analyze Sedflume data raw data.

- Continue solids mass balance analysis.
- A discussion with Dr. Lick regarding the diffusion/bioturbation processes is to be initiated via a conference call. Initial indications from another EPA project suggest that the incorporation of Dr. Lick's formulation from the flocculator experiment might not be applicable to a system like the Passaic where resuspension and deposition occur.

Historical/Geochemical Data Evaluation

- After Battelle has resolved a number of sample location issues by obtaining further information from NOAA and/or other sources, work will continue on developing biota plots.

Website/Project Database

- Malcolm Pirnie personnel will continue work on the following field application modules/aspects: Low Resolution Sediment Coring; Water Column Sampling; Data Validation; Equipment; Archive Sample Shipment Page; MEDD upload; Ansets form associated with Forms II Lite download; and GPS upload.
- Malcolm Pirnie will modify the search function on the digital library to enhance "user-friendly" aspects.
- Malcolm Pirnie and Battelle will continue to address comments submitted by demaximis, inc. on September 19, 2005 regarding issues with historic sample locations in the PREmis database.

4. Key Personnel Additions or Changes

None.

5. Attachments

Budget Status and Forecast, Reporting Period: August 13 – September 16, 2005.

BUDGET STATUS AND FORECAST
TASK ORDER 0011
LOWER PASSAIC RIVER RESTORATION PROJECT
Reporting Period 08/13/2005 through 09/16/2005

Task Description	Negotiated Budget	Authorized Budget (as of ATP 10/29/05, dated 09/02/05)	Percent	Dollars	Costs from 10/1/05 through 02/11/05	Costs from 02/12/05 through 03/11/05	Costs from 04/15/05 through 05/13/05	Costs from 05/14/05 through 06/17/05	Costs from 06/18/05 through 07/15/05	Costs from 07/16/05 through 08/12/05	Costs from 08/13/05 through 09/16/05	JTD Costs through 09/16/05	JTD Percent of Authorized Budget Spent	JTD Estimated Authorized Task Percent Complete	Estimate to Complete ²	Estimated Cost at Completion	3-Month Forecast					Percent of Authorized Budget to be Spent by mid-Nov. 2005 ³	3 - 6 Month Forecast (mid-Dec. 2005 to mid-March 2006)	Authorized Funding Less Forecast Amount as of mid-Dec. 2005	Additional Funding Required by mid-Dec. 2005	4 - 9 Month Forecast (mid-March 2006 to June 2006)	Additional Funding Required by mid-March 2006	Comments	
																	mid-Sept 2005 to mid-Oct. 2005	mid-Oct. 2005 to mid-Nov. 2005	mid-Nov. 2005 to mid-Dec. 2005	Total Estimated Cost from mid-Aug. thru mid-Dec. 2005	Total Estimated + Total Spent								
WAD 3 - Remedial Investigation/Feasibility Study Services																													
WO 01 - Project Administration/Reporting Subtotal	\$46,042	100%		\$46,042	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$46,042	100%	100%	\$0	\$46,042	\$0	\$0	\$0	\$0	\$46,042	100%	\$0	\$0	\$0	\$0	\$0		
WO 02 - Meetings	\$9,106	100%		\$9,106	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,106	100%	100%	\$0	\$9,106	\$0	\$0	\$0	\$0	\$9,106	100%	\$0	\$0	\$0	\$0	\$0		
WO 03 - Pre-Expansion Activity Plan and Schedule Subtotal																													
4.2a Data Entry	\$5,450	100%		\$5,450	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,450	100%	0%	\$5,400	\$5,400	\$5,400	\$0	\$0	\$5,400	99%	\$0	\$50	\$0	\$0	\$0	Minish Park data upload.		
4.2b Electronic Data Upload	\$29,758	100%		\$29,758	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$29,758	100%	100%	\$0	\$29,758	\$0	\$0	\$0	\$0	\$29,758	100%	\$0	\$0	\$0	\$0	\$0		
WO 04 - Populate and QC Database Subtotal																													
5d Create Database Design and Documentation	\$42,722	100%		\$42,722	\$0	\$0	\$5,350	\$0	\$0	\$0	\$0	\$42,722	100%	100%	\$0	\$42,722	\$0	\$0	\$0	\$0	\$42,722	100%	\$0	\$0	\$0	\$0	\$0		
5e Laboratory Upload	\$0	0%		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0%	0%	\$0	\$0	\$0	\$0	\$0	\$0	0%	\$0	\$0	\$0	\$0	\$0	\$0		
5f Laboratory Validation	\$0	0%		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0%	0%	\$0	\$0	\$0	\$0	\$0	\$0	0%	\$0	\$0	\$0	\$0	\$0	\$0		
5g Communication	\$12,902	100%		\$12,902	\$0	\$0	\$1,250	\$0	\$0	\$0	\$0	\$12,902	100%	100%	\$0	\$12,902	\$0	\$0	\$0	\$0	\$12,902	100%	\$0	\$0	\$0	\$0	\$0		
WO 05 - Web Site and GIS System Subtotal																													
5d Create Database Design and Documentation	\$115,722	100%		\$115,722	\$0	\$0	\$6,586	\$0	\$0	\$0	\$0	\$115,722	100%	100%	\$0	\$115,722	\$0	\$0	\$0	\$0	\$115,722	100%	\$0	\$0	\$0	\$0	\$1,500	\$1,500	
WO 06 - Establish Technical Expert Team Subtotal																													
6.1 Establish Technical Expert Team	\$25,409	100%		\$25,409	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,409	100%	100%	\$0	\$25,409	\$0	\$0	\$0	\$0	\$25,409	100%	\$0	\$0	\$0	\$0	\$0		
WAD 3 - Remedial Investigation/Feasibility Study Services Total																													
	\$273,739	100%		\$273,739	\$0	\$0	\$6,586	\$0	\$0	\$0	\$0	\$267,288	100%	98%	\$5,400	\$273,689	\$0	\$0	\$5,400	\$273,689	100%	\$0	\$51	\$0	\$1,500	\$1,500			
WAD 4 - Project Management and Community Relations																													
WO 01 - Project Management and Administration																													
1.1a Project Management	\$86,428	100%		\$86,428	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$89,114	103%	100%	\$0	\$89,114	\$0	\$0	\$0	\$0	\$89,114	103%	\$0	\$2,686	\$2,686	\$0	\$0		
1.1a Project Management (2005)	\$223,525	75%		\$167,643	\$11,211	\$19,730	\$19,730	\$20,740	\$28,769	\$17,150	\$29,894	\$25,671	\$170,346	102%	102%	\$53,179	\$233,525	\$18,000	\$18,000	\$18,000	\$54,000	\$234,546	134%	\$54,000	\$55,703	\$110,731	\$54,000	\$54,000	
1.2a Project Support Documentation and Administration	\$79,111	100%		\$79,111	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$79,111	100%	100%	\$0	\$79,111	\$0	\$0	\$0	\$0	\$79,111	100%	\$0	\$0	\$0	\$0	\$0		
1.2a Project Support Documentation and Administration (2005)	\$113,468	79%		\$89,188	\$14,476	\$5,130	\$12,887	\$10,645	\$9,383	\$6,772	\$7,424	\$9,948	\$76,665	86%	86%	\$36,803	\$113,468	\$7,200	\$7,200	\$21,600	\$98,265	\$110%	\$21,750	\$21,750	\$21,750	\$21,750	\$0		
1.3a Subcontract Administration Laboratories	\$61,213	100%		\$61,213	\$5,998	\$2,803	\$10,918	\$11,115	\$1,442	\$0	\$11,088	\$3,375	\$75,612	124%	90%	\$0	\$75,612	\$0	\$0	\$0	\$0	\$75,612	124%	\$0	\$14,399	\$14,399	\$0	\$0	
1.3a Subcontract Administration Field Sampling Support	\$41,359	100%		\$41,359	\$804	\$1,145	\$4,016	\$4,035	\$5,711	\$7,271	\$9,605	\$16,885	\$53,311	129%	80%	\$11,954	\$41,359	\$5,000	\$1,000	\$11,000	\$6,313	\$46,313	155%	\$4,500	\$22,554	\$27,454	\$4,500	\$4,500	
1.3c Professional Subcontractors	\$101,435	88%		\$89,518	\$4,449	\$4,051	\$3,994	\$4,497	\$5,204	\$8,841	\$3,793	\$15,462	\$96,438	100%	88%	\$0	\$96,438	\$4,500	\$4,500	\$4,500	\$13,500	\$109,938	123%	\$11,500	\$20,420	\$121,920	\$13,500	\$11,500	
1.3d Radiomobile and POC Laboratories	\$8,439	100%		\$8,439	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,439	100%	0%	\$0	\$8,439	\$0	\$0	\$0	\$0	\$8,439	100%	\$0	\$19	\$0	\$0	\$0	\$0	
1.3d Field Sampling Support - Summer/Fall 2004	\$4,806	100%		\$4,806	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,741	99%	99%	\$0	\$4,741	\$0	\$0	\$0	\$0	\$4,741	99%	\$0	\$65	\$0	\$0	\$0	\$0	
1.4a Project Communications	\$481,285	88%		\$424,450	\$27,254	\$12,993	\$44,209	\$31,502	\$22,860	\$27,617	\$23,266	\$34,241	\$349,503	82%	82%	\$113,782	\$481,285	\$20,000	\$20,000	\$20,000	\$60,000	\$489,903	96%	\$60,000	\$14,947	\$45,053	\$60,000	\$60,000	
WO 02 - Community Relations Subtotal																													
2.1a Public Meeting Support (graphics/attendance)	\$24,341	100%		\$24,341	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$24,341	100%	22%	\$24,166	\$24,341	\$6,000	\$2,000	\$2,000	\$10,000	\$16,202	67%	\$3,000	\$8,139	\$0	\$15,000	\$11,861		
2.1b Fact Sheets (topic-specific)	\$24,710	100%		\$24,710	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$24,710	100%	2%	\$24,166	\$24,710	\$2	\$0	\$0	\$0	\$24,708	2%	\$6,178	\$24,166	\$0	\$6,178	\$0		
2.1c Ongoing Communications Support	\$39,744	100%		\$39,744	\$0	\$0	\$49	\$344	\$272	\$646	\$1,264	\$2,775	\$7%	7%	\$36,969	\$39,744	\$3,000	\$1,000	\$1,000	\$9,000	\$11,775	30%	\$3,000	\$27,969	\$0	\$3,000	\$0		
2.2a Stakeholder Community Interviews	\$16,233	100%		\$16,233	\$7,444	\$1,582	\$532	\$36	\$0	\$0	\$0	\$16,233	100%	100%	\$0	\$16,233	\$0	\$0	\$0	\$0	\$16,233	100%	\$0	\$0	\$0	\$0	\$0	\$0	
2.2b Draft Community Development Plan	\$54,285	100%		\$54,285	\$1,095	\$272	\$1,586	\$31,081	\$13,457	\$9,882	\$8,644	\$2,142	\$55,781	101%	101%	\$0	\$54,285	\$0	\$0	\$0	\$0	\$54,285	101%	\$0	\$448	\$448	\$0	\$0	
2.2c RIT Final CIP	\$8,628	100%		\$8,628	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0%	0%	\$0	\$8,628	\$8,628	\$0	\$1,500	\$3,000	\$4,500	52%	\$4,128	\$4,128	\$0	\$0	\$0		
WO 03 - Community Relations Subtotal																													
3.1a MPI Technical Support	\$43,096	100%		\$43,096	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$43,096	100%	81%	81%	\$33,082	\$43,096	\$0	\$0	\$0	\$0	\$33,082	81%	\$0	\$8,014	\$0	\$0	\$0	
3.1a Technical Support (2005)	\$123,457	100%		\$123,457	\$9,823	\$0	\$0	\$0	\$0	\$8,547	\$10,717	\$883	\$23,970	24%	24%	\$0	\$45,000	\$5,000	\$5,000	\$5,000	\$5,000	\$114,770	36%	\$20,000	\$75,487	\$0	\$20,000	\$0	
3.2a Subcontractor Technical Support	\$22,500	100%		\$22,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$22,500	100%	48%	48%	\$11,752	\$22,500	\$5,000	\$5,000	\$5,000	\$5,000	\$14,748	70%	\$0	\$6,752	\$0	\$0	\$0	
WO 04 - Technical Support Subtotal																													
4.1a MPI Technical Support	\$108,093	100%		\$108,093	\$9,823	\$0	\$0	\$0	\$0	\$8,547	\$10,717	\$883	\$23,970	43%	43%	\$23,504	\$108,093	\$10,000	\$10,000	\$10,000	\$20,000	\$128,093	12%	\$0	\$84,241	\$0	\$84,241	\$0	
WAD 4 - Project Administration Total																													
	\$1,555,801	96%		\$1,406,369	\$83,404	\$45,146	\$183,626	\$94,401	\$108,852	\$86,291	\$105,857	\$117,297	\$1,456,770	82%	77%	\$309,464	\$1,481,265	\$62,700	\$59,200	\$68,700	\$283,600	\$1,566,270	97%	\$190,456	\$45,999	\$263,490	\$195,928	\$163,611	
WAD 5 - Technical Studies & Investigations																													
WO 01 - RIFS Work Plan Preparation																													
1.1a Agency Coordination/Scoping Meeting	\$14,911	100%		\$14,911	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,911	100%	100%	\$0	\$14,911	\$0	\$0	\$0	\$0	\$14,911	100%	\$0	\$0	\$0	\$0	\$0		
1.2a Evaluation and Documentation of Historical Data (Surf Sediments)	\$40,830	100%		\$40,830	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40,830	100%	100%	\$0	\$40,830	\$0	\$0	\$0	\$0	\$40,830	100%	\$0	\$0	\$0	\$0	\$0		
1.2b Evaluation and Documentation of Historical Data (Subsurface Sediments)	\$77,596	100%		\$77,596	\$12,416	\$18,676	\$4,287	\$350	\$0	\$0	\$0	\$77,596	100%	100%	\$0	\$77,596	\$0	\$0	\$0	\$0	\$77,596	100%	\$0	\$0	\$0	\$0	\$0		
1.3a Identity Draft DOQs/ARs/PPGs	\$29,177	100%		\$29,177	\$1,315	\$5,576	\$1,548	\$0	\$0	\$0	\$0																		